ABSTRACT OF THE DISCLOSURE

A photon arrival time detector has the form of a photocathode 4 from which a photoelectron is ejected by an incident photon. The photoelectron is accelerated by an applied voltage to a CCD sensor 6. The voltage between the photocathode 4 and the CCD sensor 6 is time varying such that the arrival energy of the electron at the CCD sensor 6 depends upon the time of its arrival at the photocathode 4. Thus, the arrival time of the photon is represented by the intensity of the pixel event recorded by the CCD sensor 6.